K.C. A[1]
Shakya D[1]
Nepal A[2]

Civil Service Hospital,
Kathmandu, Nepal[1]

Patan Academy of Health Science
Lalitpur,Nepal[2]

Correspondence:
Dr. Dipesh Shakya
Civil Service Hospital,
Kathmandu, Nepal

Email:dipeshent@hotmail.com

LARYNGEAL SCHWANNOMA PRESENTED AS GLOBUS SENSATION

Abstract
Laryngeal Schwannoma is an extremely rare with incidence of 0.1 – 1.5% in all benign laryngeal tumours making it difficult to diagnose. The most common anatomical site is the aryepiglottic fold, followed by the arytenoids, ventricular folds, and vocal cord. Most patients present with hoarseness, dysphagia or globus sensation.The present case report describes a 37 year old female patient with symptoms of globus sensation.

Key Words: Laryngeal schwannoma, Globus Sensation

INTRODUCTION:

Schwannomas are benign, solitary, slow growing, encapsulated tumors arising from Schwann cells of the peripheral nervous system.[1] About 50% of neurogenic tumours originate in the head and neck region and are primarily located in the parapharyngeal space.[2] Laryngeal schwannomas are rarely found, and account for 0.1% to 1.5% of all benign tumors of the larynx.[3]

CASE REPORT:

A 37-year-old female presented at our Otolaryngology clinic with a history of globus sensation since last four months. She had no difficulty in respiration and hoarseness. There was no palpable cervical lymph node. Indirect laryngoscopy showed a large, reddish glistening mass at interarytenoid region with loss of visualization of posterior two third of false and true vocal cords. Preoperative investigations were done and the patient was admitted in our hospital. Under general anaesthesia, fiberoptic orotracheal intubation was done avoiding tracheostomy, with great care without producing any injury to the mass. Microlaryngoscopic excision of that mass was performed. The tumour was meticulously removed from its base with the help of microscissors without injuring vocal cords. The mass was 2.5 cm in length and 2 cm in breadth. It was firm in consistency and had a smooth glistening surface (Fig.1). Histopathological examination showed that the tumour was encapsulated with hypo and hypercellular areas. Hypocellular areas showing myxoid changes and hypercellular areas with spindle shaped cells along with nuclear palisading, consistent with the diagnosis of schwannoma (Fig. 2). The recovery was uneventful. After six months follow up there was no evidence of any residual mass or recurrence.

DISCUSSION:

Schwannomas were first described by Verocay in 1908 who termed them neurinomas. In 1940, Stout recognized the schwannian derivations of this neurogenic tumors and called the same entity schwannoma.[4] Laryngeal schwannomas were first described by Suchanek in 1925.[5] Schwannomas arise from schwann cells of nerve root, most frequently in the eighth cranial nerve (vestibular Schwannoma/ acoustic Schwannoma/ acoustic neuroma). The fifth cranial nerve is the second most common site. Schwannnomas are mostly benign but occasionally it may undergo malignant changes. 80% of Schwannomas are usually found in the aryepiglottic folds and in the false vocal cords in the supraglottic space; true vocal fold and epiglottis are more rare localization.[4] The superior laryngeal nerve is most commonly affected.

Symptoms of this lesion are related to mass effect; they include hoarseness, globus sensation, sore throat, odynophagia, dysphagia, dyspnoea, stridor, and dysphonia. But in our case, the patient presented with only globus sensation without hoarseness or any difficulty in respiration. Enzinger and Weiss[1] suggests that the diagnosis of schwannoma can be made in the presence of three features:

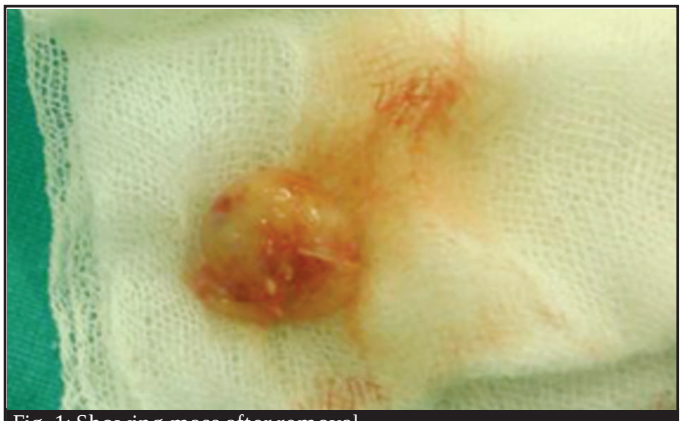
Fig. 1: Showing mass after removal

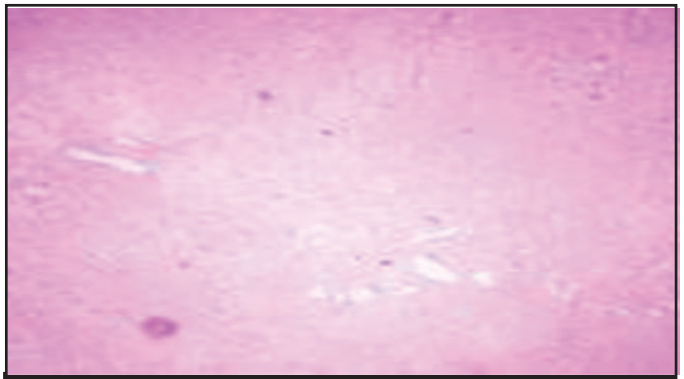
Fig. 2: Showing Histopathological feature of schwannoma.

encapsulation, Antoni A and B areas and Positive S100 reaction.[6] Surgery is the treatment of choice for schwannomas of the larynx because they are usually benign and do not recur on long term follow up after complete surgical excision. However, surgical approach depends on the site and size of tumour. In our case, microlaryngoscopic excision was done. Larger ones have to be removed by external approach. We present this case to acquaint the clinician about the presentation and the treatment option of this disease. Any atypical mass of the larynx, schwannoma as differential diagnosis should be borne in mind and treated accordingly.

CONCLUSION:

Despite its rarity, neurogenic tumors of the larynx need to be recognised. Sometimes it may present as globus sensation. Surgical resection is treatment of choice and complete resection is necessary to prevent recurrence.

REFERENCES:

1. Wang B, Dong P, Shen B et al. Laryngeal schwannoma excised under a microlaryngoscope without tracheotomy: A case report. Experimental And Theurapeutic Medicine 2014; 7: 1020-1022
2. Álvarez F.L, Gómez-Martínez J.R, Suárez-Nieto C et al. Schwannoma of the Larynx. An Infrequent Laryngeal Tumour. Acta Otorrinolaringol Esp. 2013;64(2):157—160
3. Neto PS, Prata AAS, Sá Pedroso J et al. Fifteen years of hoarseness - case report of a rare laryngeal schwannoma. Braz J Otorhinolaryngol 2013;79(3):401
4. Mannarini L, Morbini P, Bertino G et al. Acute Respiratory Distress in Patient with Laryngeal Schwannoma Case Reports in Medicine Vol 2012, Article ID 616913
5. Cohen S, Sinacori J.T and Courey M.S Laryngeal schwannoma: Diagnosis and management. Otolaryngology–Head and Neck Surgery 2014; 130 (3): 363-365
6. S Lo and WK Ho Schwannoma of the larynx—an uncommon cause of vocal cord immobility. Hong Kong Med J, 2004; 10:131-133